

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Northwest Pipe Company

Colorado Association for Manufacturing and Technology

Northwest Pipe Reduces Lead Time with Lean

Client Profile:

Northwest Pipe Company produces large diameter steel water pipes for high pressure applications. The Denver, Colorado division has been in operation since 1995, and employs 100 people.

Situation:

Northwest Pipe enjoys a majority of the market share, but with increased pressure from both foreign competition and high steel prices, the company recognized the need to improve operations to maintain their competitive advantage and market share. All manufacturing divisions across the U.S. were advised by corporate headquarters to implement Lean Manufacturing practices, and the Denver division decided to take the lead. Northwest Pipe Denver's Kellen Squires contacted the Colorado Association for Manufacturing and Technology (CAMT), a NIST MEP network affiliate, for assistance in implementing a long-term comprehensive Lean Manufacturing program.

Solution:

CAMT conducted a Lean overview for all management staff, after which the entire workforce underwent 5S (Sort, Set in Order, Shine, Standardize, Sustain) training to better organize and standardize the workplace. CAMT worked with the company to develop a Value Stream Map (VSM) exercise to transition to a one-piece flow production model. Additionally, Northwest Pipe worked with CAMT to reduce the changeover time of two machines in their facility through set up reduction workshops. With CAMT's assistance, the company streamlined workplaces as well as production and equipment changeover processes.

Results:

- * Created/retained 15 jobs.
- * Invested \$175,000 in equipment and workforce training.
- * Reduced lead time from 100 days to 20 days.
- * Reduced setup time by 50 percent.

Testimonial:

"We've been doing things the same way for 30 years, and we still had the same type of defects and hold ups we had 30 years ago. It was time to increase our efficiency and quality, and CAMT helped us do it."

Kellen Squires, Process Control Manager